

formed decontamination. The percentage of staff to be trained remains high. Some EDs lack adequate respiratory protection. Antidotes supplies are limited in some EDs. The majority of EDs report needing additional training, equipment, and improved local and regional coordination. The survey method is limited by the lack of a method for independent verification of the results.

Keywords: chemical, biological, radiological, nuclear, and explosive; coordination; emergency department; preparedness; training

Prehosp Disaster Med

Assessment of Hospital Disaster Plans for Conventional Mass-Casualty Incidents following Terrorist Explosions Using a Live Exercise Based on Data from Actual Patients

Itamar Ashkenazi,¹ Aviv Ohana,^{2,3} Bella Azaria,³ Alex Gelfer,³ Cheli Nave,³ Zehava Deutch,³ Ilana Ganz,³ Magi Fadlon,³ Eran Tal-Or,² Nurit Vaknin,² Boris Kessel,¹ Ricardo Alfici,¹ Moshe Michaelson²

1. Hillel Yaffe Medical Center, Mass Casualty Incident Registry
2. The National Committee for Hospital Preparedness for Conventional Mass Casualty Incidents; Emergency & Disaster Management Division, Ministry of Health, Israel
3. Hospital Preparedness Division, Home Front, Israel Defence Forces

Introduction: The National Committee for Hospital Preparedness for Conventional Mass Casualty Incidents is in charge of preparing the details of live exercises held yearly in public hospitals in Israel. Our experience is that live exercises are limited in their ability to test clinical decision making and its influence upon incident management. A live exercise was designed upon real patient data and tested in several public hospitals. Impact on management of live exercises is presented.

Methods: A database of histories, physical examination findings, laboratory results, and imaging results for 420 patients treated following terrorist explosions was created using information derived from actual patient encounters. Information from the database was used to create victim profiles used during three exercises. Exercises were held in three different hospitals with 500-, 600-, and 800-bed capacity.

Results: Knowledge that injury profiles are based on real patients increased the interest and involvement of clinicians participating in the exercise. Conducting the exercise helped identify faults in the hospital disaster plan in triage, emergency department management, and in proper utilization of resources beyond the emergency department such as radiology, operating rooms, and secondary transfer of patients. Knowledge of patients' diagnoses and resource needs helped in quantifying these faults.

Conclusions: Live exercises based on real patient data promote interest and involvement by participating clinicians. Previous knowledge of patients' diagnoses and resource needs allows quantifying faults identified in clinical decision making, resource utilization, and incident management.

Keywords: data; disaster plan; drill; hospital; preparedness

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Improving Emergency Preparedness by Ongoing Assessments of Readiness

B. Adini, PhD;^{1,2} D. Laor, MD, MHA;^{1,2}

R. Cohen, PhD^{1,2,3}

1. Emergency and Disaster Management Division, Ministry of Health, Israel
2. PReparED Research Center, Ben Gurion University of the Negev, Israel
3. Hebrew University, Israel

Introduction: The aim of assessing emergency preparedness is to promote effectiveness, raise professionalism, present status of preparedness, and serve as a basis for improving operations capabilities. The aim of this study was to determine if the assessment process affects the level of emergency preparedness of hospitals.

Methods: The levels of readiness of general hospitals for coping with mass casualty incidents (MCIs) and mass toxicological and biological events were assessed twice over a period of five years. A structured evaluation tool consisting of approximately 500 measurable parameters was utilized. Results of the two evaluations were compared in order to determine trends in emergency preparedness.

Results: Evaluation of hospital readiness for the three scenarios showed that there was a distinct improvement in most hospitals after the first evaluation. The number of hospitals rated as "very high" increased in the second evaluation compared to the first evaluation, (MCI: 17 vs. 6; biological: 12 vs. 9; and toxicology: 17 vs. 16). Fewer hospitals were rated as "problematic" in the second evaluation (MCI: 0 vs. 5; biological: 2 vs. 5; toxicology: 0 vs. 1).

Conclusions: Assessment of emergency preparedness appears to contribute toward improved emergency preparedness. An assessment process based on measurable benchmarks provides a basis for the development of ongoing programs for continuous evaluation and improvement of emergency preparedness. Training and exercises are the major elements that contributed to improved performance following the assessment process. The provision of feedback to hospital administrations on their strengths and weaknesses, together with a process of continuous supervision is essential. This process contributes to the ability of the hospitals to make improvements based on empirical data. The degree of improvement in level of emergency readiness is higher in hospitals that were initially found to have a lower level of emergency preparedness.

Keywords: assessment; preparedness; readiness

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